AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A vertical cavity surface emitting laser, comprising:

an active region further comprising at least one quantum well having a depth of at least 40 meV, wherein said depth is defined using the difference between a valence band offset and a conduction band offset, said quantum well being comprised of InGaAs and further including GaAs barrier layers sandwiching said at least one quantum well; and

GaAs confinement layers sandwiching said active region.

2. (Previously Presented) The vertical cavity surface emitting laser of claim 1 wherein said at least one quantum well is up to and including 50A in thickness.

3. (Previously Presented) A vertical cavity surface emitting laser, comprising:

an active region further comprising at least one quantum well having a depth of at least 40 meV, wherein said depth is defined using the difference between a valence band offset and a conduction band offset, said quantum well being comprised of InGaAs and further including GaAsN barrier layers sandwiching said at least one quantum well; and

AlGaAs confinement layers sandwiching said active region.

4. (Previously Presented) The vertical cavity surface emitting laser of claim 3 wherein said at least one quantum well is up to and including 50A in thickness.

5. (Previously Presented) A vertical cavity surface emitting laser, comprising:

an active region further comprising at least one quantum well having a depth of at least 40 meV, wherein said depth is defined using the difference between a valence band offset arid a conduction band offset, said quantum well being comprised of InGaAs and further including AIGaAs barrier layers sandwiching said at least one quantum well; and

GaAsN confinement layers sandwiching said active region.

6. (Previously Presented) The vertical cavity surface emitting laser of claim 5 wherein said at least one quantum well is up to and including 50Å in thickness.